

AMENDMENTS TO THE CLAIMS

Listing of the Claims

Claims 1-36 (Cancelled)

Claims 37-52 (Cancelled)

53. (New) A micron liquid thermosetting ink-jet ink comprising:
solid composite curing agent particles with a maximal size of less than 2 micron,
each comprising;
(a) an inert particle, and;
(b) a curing agent layered on the surface of said inert particle; impregnated in its
porosity, dispersed upon said inert particle, or any combination thereof.
54. (New) The liquid thermosetting ink-jet ink according to claim 53, wherein said
curing agent is latent.
55. (New) The liquid thermosetting ink-jet ink according to claim 54, wherein said
curing agent is selected from a group consisting of urea derivatives, imidazoles, dicyandiamide,
inorganic boron halides, their precursors and/or any mixture thereof.
56. (New) The liquid thermosetting ink-jet ink according to claim 53, wherein said inert
particle is selected from a group consisting of barium sulfate, talc, silica, kaolin, mica and glass.
57. (New) The liquid thermosetting ink-jet ink according to claim 53, adapted to cure
epoxy compounds selected from group consisting of aromatic, heterocyclic, cycloaliphatic ring
and at least two epoxy groups.

58. (New) The liquid thermosetting ink-jet ink according to claim 57, wherein the epoxy compounds are selected from group consisting of bisphenol S epoxy resins, heterocyclic epoxy resins, bisphenol A epoxy resins, hydrogenated bisphenol A epoxy resins, bisphenol F epoxy resins, Novolak epoxy resins, Novolak epoxy resins of bisphenol A, rubber-modified epoxy resins, or a mixture thereof.

59. (New) The liquid thermosetting ink-jet ink according to claim 53, additionally comprising monomers and/or oligomers selected from styrene, acrylic or methacrylic acid and esters thereof; acrylated or methacrylated epoxies; acrylated or methacrylated urethanes; wherein the unsaturated monomers are selected from (meth)acrylates, acrylated DGEBA epoxy, acrylated Novolac epoxy, acrylated polyurethane, or any combination thereof.

60. (New) The liquid thermosetting ink-jet ink according to claim 53, especially adapted for solder mask in printed circuit boards.

61. (New) The liquid thermosetting ink-jet ink according to claim 53, especially adapted for bonding devices or components in electronic manufacturing.

62. (New) The liquid thermosetting ink-jet ink according to claim 53, especially adapted for printing of layers in the manufacturing of passive component capacitors and/or resistors.

63. (New) The liquid thermosetting ink-jet ink according to claim 53, especially adapted for direct printing of conductive lines and features such as pads and/or bumps.

64. (New) The liquid thermosetting ink-jet ink according to claim 53, additionally comprising impact modifiers and/or flexibilizers having rubbery moieties or blocks in their chain.

65. (New) The liquid thermosetting ink-jet ink according to claim 53, wherein the impact modifiers and/or flexibilizers are selected from elastomeric, oligomers comprising side or end groups, selected from amines, epoxies, hydroxyls, wherein said functional terminated

rubbers or rubber-like compositions comprising polybutadienes, acrylonitrile-butadiene, styrene-butadiene, styrene-acrylate, soft polyacrylate esters, hydrogenated polybutadienes, polyisoprenes, ethylene-propylene copolymers, polydimethyl siloxane elastomers, polysulfide, polyurethane, or any mixture thereof.

66. (New) The liquid thermosetting ink-jet ink according to claim 53, additionally comprising mineral fillers, having maximal particle size of about 2 micron in the final ink; wherein concentration ranges between about 1 to 30 % by weight.

67. (New) The liquid thermosetting ink-jet ink according to claim 53, additionally comprising additives selected from surface active agents and/or colloid stabilizers, rheology modifiers, pigments and dyes, matting agents, solvents; co-solvents, diluents or any mixture thereof.